

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM579658

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT		
<b>NATURE OF CONVEYANCE:</b>	RELEASE OF SECURITY INTEREST		
<b>CONVEYING PARTY DATA</b>			
<b>Name</b>	<b>Formerly</b>	<b>Execution Date</b>	<b>Entity Type</b>
PNC BANK, NATIONAL ASSOCIATION		03/26/2020	National Banking Association: UNITED STATES
<b>RECEIVING PARTY DATA</b>			
<b>Name:</b>	DASAN ZHONE SOLUTIONS, INC.		
<b>Street Address:</b>	7195 OAKPORT STREET		
<b>City:</b>	OAKLAND		
<b>State/Country:</b>	CALIFORNIA		
<b>Postal Code:</b>	94621		
<b>Entity Type:</b>	Corporation: DELAWARE		
<b>Name:</b>	PREMISYS COMMUNICATIONS, INC.		
<b>Street Address:</b>	1209 ORANGE ST		
<b>City:</b>	WILMINGTON		
<b>State/Country:</b>	DELAWARE		
<b>Postal Code:</b>	19801		
<b>Entity Type:</b>	Corporation: DELAWARE		
<b>Name:</b>	PARADYNE NETWORKS, INC.		
<b>Street Address:</b>	1209 ORANGE ST		
<b>City:</b>	WILMINGTON		
<b>State/Country:</b>	DELAWARE		
<b>Postal Code:</b>	19801		
<b>Entity Type:</b>	Corporation: DELAWARE		
<b>Name:</b>	PARADYNE CORPORATION		
<b>Street Address:</b>	7195 OAKPORT STREET		
<b>City:</b>	OAKLAND		
<b>State/Country:</b>	CALIFORNIA		
<b>Postal Code:</b>	94621		
<b>Entity Type:</b>	Corporation: DELAWARE		
<b>Name:</b>	DASAN NETWORK SOLUTIONS, INC.		
<b>Street Address:</b>	7195 OAKPORT STREET		
<b>City:</b>	OAKLAND		

CH \$565.00 5667114

<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94621
<b>Entity Type:</b>	Corporation: CALIFORNIA
<b>Name:</b>	KEYMILE GMBH
<b>Street Address:</b>	Wohlenbergstraße 3
<b>City:</b>	30179 Hannover
<b>State/Country:</b>	GERMANY
<b>Entity Type:</b>	Gesellschaft Mit Beschränkter Haftung (GmbH): GERMANY
<b>Name:</b>	DASAN NETWORK SOLUTIONS, INC
<b>Street Address:</b>	644beon-gil, Bundang-gu
<b>Internal Address:</b>	9Fl., 49, Daewangpangyo-ro
<b>City:</b>	Seongnam-si
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Entity Type:</b>	Corporation: KOREA, REPUBLIC OF

**PROPERTY NUMBERS Total: 22**

Property Type	Number	Word Mark
Registration Number:	5667114	DZS
Registration Number:	4745309	FIBERLAN
Registration Number:	4252361	IP ZHONE
Registration Number:	4313579	ZHONE FIBERCELL
Registration Number:	4455296	BANDWIDTH CHANGES EVERYTHING
Registration Number:	3331453	ETHERXTEND
Registration Number:	3725214	MXK
Registration Number:	3390835	ZNID
Registration Number:	2885561	REACHDSL
Registration Number:	2725113	ZHONE
Registration Number:	2725112	MALC
Registration Number:	2586521	ZMS
Registration Number:	2608096	SLMS
Registration Number:	2856212	BITSTORM
Registration Number:	2248498	PARADYNE
Registration Number:	2852625	KEYMILE
Registration Number:	4309562	ZHONE FIBERHOME
Serial Number:	88236798	DZS
Serial Number:	87911757	DZS FIBERCELL
Serial Number:	87923526	VNOS
Serial Number:	87440078	DZS EVERY CONNECTION MATTERS
Serial Number:	87787790	ONTT

**CORRESPONDENCE DATA****Fax Number:** 2027995000*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.***Phone:** 2027994000**Email:** gregory.esau@dlapiper.com**Correspondent Name:** Gregory Esau**Address Line 1:** 500 Eighth Street, NW**Address Line 4:** Washington, D.C. 20004

<b>NAME OF SUBMITTER:</b>	Gregory Esau
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<b>SIGNATURE:</b>	/Gregory Esau/
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<b>DATE SIGNED:</b>	06/04/2020
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**Total Attachments: 6**

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## **TERMINATION AND RELEASE OF LIEN IN INTELLECTUAL PROPERTY**

**THIS TERMINATION AND RELEASE OF LIEN IN INTELLECTUAL PROPERTY** (this “Release”), is dated as of March 26, 2020, and made by and among PNC BANK, NATIONAL ASSOCIATION (“Agent”) in its capacity as agent under the below-defined Security Agreement by and among, and DASAN ZHONG SOLUTIONS, INC., a Delaware corporation, PREMISYS COMMUNICATIONS, INC., a Delaware corporation, PARADYNE NETWORKS, INC., a Delaware corporation, PARADYNE CORPORATION, a Delaware corporation, DASAN NETWORK SOLUTIONS, INC., a California corporation, KEYMILE GMBH, a limited liability company (Gesellschaft mit beschränkter Haftung) organized under the laws of Germany, registered with the commercial register (Handelsregister) of the local court (Amtsgericht) of Hannover under registration number HRB 208693 (“KeyMile”), and DASAN NETWORK SOLUTIONS, INC., a corporation organized under the laws of the Republic of Korea (collectively, the “Grantor”).

WHEREAS, pursuant to that certain Intellectual Property Security Agreement dated as of February 27, 2019 (the “Security Agreement”), made by the Grantor in favor of Agent, a security interest was granted by the Grantor to Agent, in certain collateral, including the IP Collateral (as hereinafter defined);

WHEREAS, the Security Agreement was recorded in the Trademark Division of the United States Patent and Trademark Office (the “USPTO”) on February 28, 2019, at Reel 6577 and Frame 0145, and in the Patent Division of the USPTO on February 28, 2019, at Reel 048467 and Frame 0326;

WHEREAS, Agent now desires to terminate and release its security interest in the IP Collateral defined below;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and upon the terms set forth in this Release, Agent hereby states as follows:


1. Definitions. The term “IP Collateral,” as used herein, means all of the Grantor’s right, title and interest in the intellectual property listed on Schedule A hereto.

2. Release of Security Interest. Agent hereby terminates, releases and discharges its security interest in the IP Collateral and reassigns to the person or persons legally entitled thereto all of its right, title and interest in the IP Collateral. Agent acknowledges that this Release may be filed with the USPTO or any other governmental office to evidence the termination and release granted by this Release.

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IN WITNESS WHEREOF, the Agent has caused this Release to be executed by their duly authorized officers as of the date first written above.

**PNC BANK, NATIONAL ASSOCIATION**

By:   
Name: Steve Roberts  
Title: Senior Vice President

**Schedule A**

1. Patents and Patent Applications:

<u>Grantor</u>	<u>Patent/ Patent Application</u>	<u>Registration/ Application No.</u>	<u>Registration/ Application Date</u>
DASAN ZHONG SOLUTIONS, INC.	SYSTEM FOR REAL TIME VOICE QUALITY MEASUREMENT IN VOICE OVER PACKET NETWORK	7197010	03/27/2007
PARADYNE CORPORATION	PERFORMANCE CUSTOMIZATION SYSTEM AND PROCESS FOR OPTIMIZING XDSL PERFORMANCE	9130654	09/08/2015
PARADYNE CORPORATION	SYSTEM AND METHOD FOR FAULT ISOLATION IN A PACKET SWITCHING NETWORK	8867335	10/21/2015
PARADYNE CORPORATION	SYSTEM AND METHOD FOR ADAPTING A CHANGE IN CONSTELLATION DENSITY WHILE RECEIVING A SIGNAL	8279969	10/02/2012
PARADYNE CORPORATION	DETERMINATION OF NETWORK PERFORMANCE CHARACTERISTICS	7969900	06/28/2011
PARADYNE CORPORATION	SYSTEM AND METHOD FOR THE MEASUREMENT OF SERVICE QUALITY IN A COMMUNICATION NETWORK	7936689	05/03/2011
PARADYNE CORPORATION	PERFORMANCE CUSTOMIZATION SYSTEM AND PROCESS FOR OPTIMIZING XDSL PERFORMANCE	7916776	03/29/2011
PARADYNE CORPORATION	SYSTEM AND METHOD FOR ADAPTING TO A CHANGE IN CONSTELLATION DENSITY WHILE RECEIVING A SIGNAL	7835459	11/16/2010
PARADYNE CORPORATION	SUBSCRIBER LINE DRIVER WITH EQUALIZER	7747000	06/29/2010
PARADYNE CORPORATION	SYSTEM AND METHOD FOR STATISTICAL CONTROL OF POWER DISSIPATION WITH HOST ENFORCEMENT	7558203	07/07/2009

PARADYNE CORPORATION	SYSTEM AND METHOD FOR ADAPTING TO A CHANGE IN CONSTELLATION DENSITY WHILE RECEIVING A SIGNAL	7522679	04/21/2009
PARADYNE CORPORATION	SYSTEM AND METHOD FOR IMPROVED DATA TRANSMISSION SPEED BY FIXING THE LOWER CORNER FREQUENCY AT A FREQUENCY ABOVE VOICE BAND IN A SYMMETRIC DSL TRANSMISSION SYSTEM	7430212	09/30/2008
PARADYNE CORPORATION	TONE ORDERED DISCRETE MULTITONE INTERLEAVER	7418048	08/26/2008
PARADYNE CORPORATION	SYSTEM AND METHOD FOR SUBSCRIBER LOOP TESTING	7289604	10/30/2007
PARADYNE CORPORATION	DIGITAL SUBSCRIBER LINE DRIVER	7149268	12/12/2006
PARADYNE CORPORATION	DISCRETE MULTITONE INTERLEAVER	7099401	08/29/2006
PARADYNE CORPORATION	TONE ORDERED DISCRETE MULTITONE INTERLEAVER	7088781	08/08/2006
PARADYNE CORPORATION	DIGITAL SUBSCRIBER LINE DRIVER	6975694	12/13/2005
PARADYNE CORPORATION	SUBSCRIBER LINE DRIVER AND TERMINATION	6782096	08/24/2004
DASAN NETWORK SOLUTIONS, INC.	OPTICAL ETHERNET APPARATUS CAPABLE OF RESET CONTROL	9806800	10/31/2017

2. Trademarks and Trademark Applications:

<u>Grantor</u>	<u>Mark</u>	<u>Registration No.</u>	<u>Registration Date</u>
DASAN ZHONE SOLUTIONS, INC.	DZS (Stylized)	5667114	01/29/2019
DASAN ZHONE SOLUTIONS, INC.	FIBERLAN	4745309	05/26/2015

DASAN ZHONE SOLUTIONS, INC.	IP ZHONE	4252361	12/04/2012
DASAN ZHONE SOLUTIONS, INC.	ZHONE FIBERCELL	4313579	04/02/2013
DASAN ZHONE SOLUTIONS, INC.	BANDWIDTH CHANGES EVERYTHING	4455296	12/24/2013
DASAN ZHONE SOLUTIONS, INC.	ETHERXTEND	3331453	11/06/2007
DASAN ZHONE SOLUTIONS, INC.	MXK	3725214	12/15/2009
DASAN ZHONE SOLUTIONS, INC.	ZNID	3390835	03/04/2008
DASAN ZHONE SOLUTIONS, INC.	REACHDSL	2885561	09/21/2004
DASAN ZHONE SOLUTIONS, INC.	ZHONE	2725113	06/10/2003
DASAN ZHONE SOLUTIONS, INC.	MALC	2725112	06/10/2003
DASAN ZHONE SOLUTIONS, INC.	ZMS	2586521	06/25/2002
DASAN ZHONE SOLUTIONS, INC.	SLMS	2608096	08/13/2002
DASAN ZHONE SOLUTIONS, INC.	BITSTORM	2856212	06/22/2004
DASAN ZHONE SOLUTIONS, INC.	PARADYNE (Stylized)	2248498	06/01/1999
KEYMILE GMBH	XMC	4890948	01/26/2016
KEYMILE GMBH	MILEGATE	3189689	12/26/2006
KEYMILE GMBH	KEYMILE	2852625	06/15/2004
DASAN ZHONE	ZHONE FIBERHOME	4309562	03/26/2013



SOLUTIONS, INC. (FORMERLY KNOWN AS ZHONE TECHNOLOGIES , INC.)			
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Trademark Applications:

<u>Grantor</u>	<u>Mark</u>	<u>Application No.</u>	<u>Application Date</u>
DASAN ZHONE SOLUTIONS, INC.	DZS	88236798	12/20/2018
DASAN ZHONE SOLUTIONS, INC.	DZS FIBERCELL	87911757	05/08/2018
DASAN ZHONE SOLUTIONS, INC.	VNOS	87923526	05/16/2018
DASAN ZHONE SOLUTIONS, INC.	DZS EVERY CONNECTION MATTERS & Design	87440078	05/08/2017
DASAN NETWORK SOLUTIONS, INC.	ONTT	87787790	02/07/2018

3. Copyrights and Copyright Applications:

<u>Grantor</u>	<u>Title</u>	<u>Registration No.</u>	<u>Registration Date</u>
PARADYNE CORPORATION	Analysis entre	TX0001917920	09/17/1986
PARADYNE CORPORATION	Paradyne DCX network supervisory controller software	TX0001481401	12/06/1984
PARADYNE CORPORATION	Paradyne system/34 purchasing/receiving system computer program	TX0000739790	07/29/1981